UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,059	07/30/2001	Pankaj N. Parmar	10559-503001	2670

			EXAMINER
20985	7590	10/19/2005	WALSH, JOHN B

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ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

<table>
<tr><td rowspan="2"></td><td colspan="2">Application No.</td><td colspan="2">Applicant(s)</td></tr>
<tr><td colspan="2">09/919,059</td><td colspan="2">PARMAR ET AL.</td></tr>
<tr><td rowspan="2">Office Action Summary</td><td colspan="2">Examiner</td><td>Art Unit</td><td></td></tr>
<tr><td colspan="2">John B. Walsh</td><td>2151</td><td></td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 July 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-4, 7, 8, 10, 13-16, 19, 20, 22-30, 33, 34, 37 and 39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-4, 7, 8, 10, 13-16, 19, 20, 22-30, 33, 34, 37 and 39</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2.   Claims 1-4, 7, 8, 10, 13-16, 19, 20, 22, 24-30, 33, 34 and 37-39 are rejected under 35

U.S.C. 102(a) as being anticipated by WO 00/78004 A2 to Iyer et al.

As concerns claims 1 and 15, identifying one or more policies associated with a network

component (p. 7, lines 13-14); generating a list of one or more groups to which the network

component belongs (p. 3, line 17, 19, 36-38); and identifying one or more policies associated with

each of the groups in the generated list (p. 3, line 36-p. 4, line 9); in which identifying one or more

policies associated with the network component comprises: searching an entry associated with the

network component in an aggregated data set to identify one or more pointers (inherent to have

pointers for access to memory locations of databases) to a deployment policy tree (p. 2, line 29; p. 8,

lines 11-12); and based on the identified one or more pointers, searching the deployment policy tree

to identify one or more policies directly associated with the network component (p. 4, lines 1-14, 19-

23, p. 3, lines 8-12); in which generating the list of one or more groups to which the network

component belongs comprises: searching an entry associated with the network component in an

aggregated data set to identify a pointer (inherent to have pointers for access to memory locations of

databases) to a network configuration tree; and based on the identified pointer, searching the

configuration tree to identify a parent node corresponding to a group to which the network

component belongs (p. 3, line 29, 36-38, p. 4, lines 1-14).

As concerns claims 2, 16 and 26, in which the network component comprises one or more

of the following: a network device, a device group, a device subgroup, a user, a group of users, an

application, a group of applications, an end-host, a group of end-hosts, and one or more time

conditions (p. 2, lines 33-34).

As concerns claim 3, the method of claim 2 in which at least one of the identified policies

associated with the network component is currently deployed (condition of policy is satisfied).

As concerns claim 4, the method of claim 2 in which at least one of the identified policies

associated with the network component is currently undeployed (condition of policy is not satisfied).

As concerns claim 27, in which identifying one or more policies associated with the

network component comprises: searching an entry associated with the network component in an

aggregated data set to identify one or more pointers (inherent to have pointers for access to memory

locations of databases) to a deployment policy tree (p. 2, line 29, p. 8, lines 11-12); and based on the

identified one or more pointers, searching the deployment policy tree to identify one or more

policies directly associated with the network component (p. 4, lines 1-14, 19-23, p. 3, lines 8-12).

As concern claim 28, in which generating the list of one or more groups to which the

network component belongs comprises: searching an entry associated with the network component

in an aggregated data set to identify a pointer (inherent to have pointers for access to memory

locations of databases) to a network configuration tree; and based on the identified pointer,

searching the configuration tree to identify a parent node corresponding to a group to which the

network component belongs (p. 3, line 29, 36-38, p. 4, lines 1-14).

As concerns claims 7, 19, 29 and 37, further comprising recursively searching the

aggregated data set (list in database has recursive terms) and the configuration tree until a non-group

node is encountered in the configuration tree (p. 2, line 26; in a central database user can stop

searching when they come across the second database information when they are searching only for

the first database information).

As concerns claims 8 and 20, in which the recursive searching generates a group chain

list (database).

As concerns claim 30, in which identifying one or more policies associated with each of

the groups in the generated list comprises, for each group in the list: searching an entry associated

with the group in an aggregated data set to identify one or more pointers (inherent to have pointers

for access to memory locations of databases) to a deployment policy tree; and based on the

identified one or more pointers, searching the deployment policy tree to identify one or more

policies directly associated with the group (p. 4, lines 1-14, 19-23; p. 3, lines 8-12).

As concerns claims 10 and 22, in which one or more of the operations is performed at

least in part using an aggregated data set (p. 2, lines 26-29).

As concerns claims 13 and 24, in which the aggregated data set comprises a plurality of

entries (plurality of data elements in database; p. 3, line 1; p. 3, lines 37-38), each entry

corresponding to a network component and including a network component identifier (p. 4, lines 1-

14), one or more pointers (inherent to have pointers for access to memory locations of databases) to

a deployment policy tree, and a pointer (inherent to have pointers for access to memory locations of

databases) to a network configuration tree (p. 8, lines 11-12).

As concerns claim 14, the method of claim 1 in which providing a capability to perform

operations on a computer system comprises providing at a network management policy decision

point a policy based network management software application capable of performing the operations

(abstract, p. 2, lines 9-23; p. 3, line 8).

As concerns claim 25, a policy based network management (PBNM) system comprising:

a network configuration tree configured to store a tree representation of a network configuration

(figures 1 and 2), the tree representation being formed of a plurality of nodes, each node

corresponding to a network component (p. 2, line 29; p. 8, lines 11-12); a deployed policy tree

configured to store a tree representation of policies associated with network components (p. 2, line

29; p. 8, lines 11-12); an aggregated data set configured to store a plurality of data elements

including one or more identity elements (plurality of data elements in database; p. 3, line 1; p. 3,

lines 37-38), one or more pointers (inherent to have pointers for access to memory locations of

databases) to the deployed policy tree, and one or more pointers (inherent to have pointers for access

to memory locations of databases) to the network configuration tree, each identity element

identifying a network component and having an associated network configuration tree pointer

(inherent to have pointers for access to memory locations of databases) and one or more associated

deployed policy tree pointers (inherent to have pointers for access to memory locations of

databases); and one or more software components (p. 2, lines 9-23; p. 3, line 8) configured to

identify one or more policies associated with a network component; generate a list of one or more

groups to which the network component belongs (p. 3, line 17, 19, 36-38); and identify one or more

policies associated with each of the groups in the generated list (p. 3, line 36-p. 4, line 9).

As concerns claim 33, a method comprising providing a capability to perform operations

on a computer system, the operations comprising: receiving a request (602) to identify one or more

policies associated with a specified subject; identifying one or more policies directly associated with

the specified subject (p. 7, lines 13-14); generating a list of one or more groups to which the

specified subject belongs (p. 3, line 17, 19, 36-38); and identifying one or more policies associated

with each of the groups in the generated list (p. 3, line 36-p. 4, line 9).

As concerns claim 34, the method of claim 33 in which the specified subject comprises one

or more of the following: a network device, a device group, a device subgroup, a user, a group of

users, an application, a group of applications, an end host, a group of end-hosts, and one or more time

conditions (p. 2, lines 33-34).

As concerns claim 39, the method of claim 33 in which providing a capability to perform

operations on a computer system comprises providing at a network management policy decision

point a policy based network management software application capable of performing the operations

(p. 2, lines 9-23; p. 3, line 8).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/78004 A2

to Iyer et al. as applied above in view of U.S. Patent No. 6,778,534 to Tal et al.

Iyer et al. do not explicitly disclose the aggregated data set comprises a hash table or a red-black tree.

Tal et al. '534 disclose a hash table for storing and organizing different data types (paragraph 38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the system of Iyer et al. with a hash table, as taught by Tal et al. '534, in order to store different types of data in an organized fashion.

Response to Arguments

5.   Applicant's arguments filed July 20, 2005 have been fully considered but they are not persuasive.

The applicant argues Iyer does not disclose a hierarchical arrangement to generate a list of groups for a network node. Iyer at page 4, line 6 discloses, "providing a hierarchical organization of the group" and at page 3, line 36-page 4, line 2 discloses a list of groups.

The applicant argues Iyer does not disclose an aggregated data set that includes an entry associated with the network component, with such entry identifying pointers to the deployment policy tree and the configuration tree that reduces or an aggregated data set that includes one or more identity elements that identify a network component and has associated network configuration tree pointer and one or more associated deployed policy tree pointers. It appears the applicant is referring to the limitations found in former claims 5 and 6, now incorporated into claim 1, wherein Iyer discloses in which identifying one or more policies associated with the network component comprises: searching an entry associated with the network component in an aggregated data set to identify one or more pointers (inherent to have pointers for access to memory locations of databases) to a deployment

policy tree (p. 2, line 29; p. 8, lines 11-12); and based on the identified one or more pointers,

searching the deployment policy tree to identify one or more policies directly associated with the

network component (p. 4, lines 1-14, 19-23; p. 3, lines 8-12); in which generating the list of one or

more groups to which the network component belongs comprises: searching an entry associated with

the network component in an aggregated data set to identify a pointer (inherent to have pointers for

access to memory locations of databases) to a network configuration tree; and based on the

identified pointer, searching the configuration tree to identify a parent node corresponding to a

group to which the network component belongs (p. 3, line 29, 36-38; p. 4, lines 1-14).

Conclusion

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
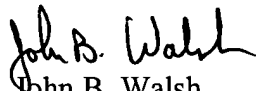
        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The

examiner can normally be reached on Monday-Thursday from 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John B. Walsh
Primary Examiner
Art Unit 2151